container in which the arc gas can accumulate at the middle of the emission path of the arc gas at the inner wall face of the interphase barrier of the main contact point. This makes it possible to appropriately suppress the temperature of the arc gas blown from the emission window to the main terminal, thus preventing damage to the wiring cable due to an excessively heated main terminal, and interphase short-circuiting caused by the fusion of the interphase barrier, for example.

Claims

1. An electromagnetic contactor, characterized in having a main contact point for a plurality of phases consisting of a pair of fixed contacts opposed to each other and a movable contact for bridging the space therebetween, wherein the neighboring main contact points have therebetween an interphase barrier, and

an emission path for arc gas caused when the main contact point is opened or closed has, at the middle thereof, a concave section provided at the inner wall face of the interphase barrier.

2. An electromagnetic contactor according to Claim 1, characterized in that the concave section consists of a narrow groove perpendicular to the emission path of the arc gas.

3. An electromagnetic contactor according to Claim 2, characterized in that the inner wall face of the interphase barrier at the upstream side of the arc gas emission path is recessed from the downstream side so as to sandwich the concave section.

Abstract

In an electromagnetic contactor in which neighboring main contact points 3 have therebetween an interphase barrier 17, a concave section 23 is provided at the inner wall face of the interphase barrier 17, this position being at the middle of the emission path of the arc gas that is generated from the opening and closing of a main contact point 3 (shown by the arrow). The existence of this concave section 23 allows the arc gas passing from an arc

generation point to a emission window 20 to be accumulated in the concave section 23, which acts as a container, thus reducing the rate at which the arc gas is emitted. As a result, the heat quantity dispersed from the arc gas to the interphase barrier 17 due to heat transfer is increased, thus reducing the temperature of the arc gas blown out of the emission window 20, which suppresses damage to the wiring cable due to excessive heating of the main terminal 16 onto which the arc gas is blown, and fusion of the interphase barrier 17, for example.

Fig. 1

17 Interphase barrier

23 Concave section